

NOTE ON THE CORRECT HABITAT OF *PATELLA*
(*SCUTELLASTRA*) *KERMADECENSIS*, PILSBRY.

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(Communicated by the Secretary.)

Some months ago, Prof. F. W. Hutton drew my attention to a communication from Mr. Brazier printed in the Proceedings of the Linnean Society of New South Wales (Vol. ix., 2nd Ser., p. 183) in which it is stated that South Africa is the true habitat of *Patella kermadecensis*, and that Mr. Pilsbry was mistaken in supposing that his specimens came from the Kermadec Islands. Apparently, Mr. Brazier arrives at this conclusion from the fact that a specimen in his possession, originally obtained from a New Zealand dealer notoriously inaccurate in the localities assigned to his specimens, has adhering to it two individuals of *Patella cochlear*, Born, a species known to inhabit the Cape of Good Hope. He also considers it extremely improbable that such a large and conspicuous species as that described by Mr. Pilsbry should have been overlooked by the late Mr. John MacGillivray, the naturalist attached to H.M.S. "Herald," which ship, under the command of Capt. Denham, in the year 1854, made a stay of nearly four weeks at Sunday Island, the largest of the Kermadec Group.

As Mr. Pilsbry's types were collected by myself at Sunday Island, I wrote a few lines with the intention of forwarding them to the Society. Just at that time, however, I received the following part of the "Proceedings," in which I noticed that Mr. Hedley had, on the strength of information furnished by my friend Mr. C. Spencer, again asserted the claims of the Kermadec Islands (see Vol. ix., 2nd Ser., p. 465). Thinking that this was

sufficient to set the matter at rest, I threw aside what I had written. Unfortunately I did not then notice a subsequent communication from Mr. Brazier printed in the same number (p. 566), in which, while granting that *Patella kermadecensis* might have been collected at Macaulay Island, one of the smaller islands of the group, he still declined to admit its nativity in Sunday Island. Perhaps I may now be allowed to mention what must be regarded as conclusive evidence on the point.

In July, 1887, the New Zealand Government despatched the steamer "Stella" to the Kermadec Islands for the purpose of annexing them to the colony, and I was kindly granted permission to accompany the expedition. My time was mostly given to an examination of the botany of the group; but while engaged in this work I was able to pay some attention to the fauna. We first landed on Sunday Island on the north side, and I then noticed (as in fact all the members of our party did) that the rocks in the vicinity of the landing place were covered with large limpets, four or five inches in diameter. Attempts were made to collect some of them, but they could not be reached from the boat, and the violent surf breaking on the rocks made it impossible to get at them from the shore. Two days later, we landed at Boat Cove, on the eastern shore of the island. In this locality the limpets were even still more plentiful, and as it was low water at the time I was able to knock several off the rocks with a spade. While I was on shore botanising our boatmen collected quite a large number, most of which were given to me. The next day they were seen in profusion on Meyer Island, an outlying rock on the north side of Sunday Island. In short, we noticed them on every part of the coast that was at all suitable; and I have no hesitation in saying that in calm weather it would be quite possible to load a small vessel with them, so numerous are they. Afterwards, we found that they were equally plentiful on the shore of Macaulay Island and the other small islands of the group.

Soon after my return to Auckland, I forwarded specimens to several of the New Zealand Museums, and to private collectors, both in New Zealand and abroad. Among others, several

specimens were sent to Mr. E. W. Roper, of Revere, Massachusetts, and two of these were given by him to Mr. Pilsbry. Upon these the original description printed in the "Nautilus" is founded.

Since my visit, great numbers of the *Patella* have been brought to New Zealand by the officers and crew of the "Hinemoa," which vessel now regularly visits the group once a year. On one occasion a sackful was brought to me at the Museum, and offered for a few shillings. Having a stock sufficient for my requirements, I did not purchase, and the sack was eventually sold to the dealer alluded to by Mr. Brazier. Doubtless the shell has passed into the hands of many collectors from this source.

As Mr. Brazier remarks, it is somewhat curious that such a conspicuous species was not noticed by Mr. MacGillivray. But I believe that the landing place principally used during the visit of the "Herald" was Denham Bay, on the west side of the island. This is sandy, and of course anyone landing there would fail to see the *Patella*. The "Herald," too, had remarkably rough weather during almost the whole of her stay, and that would effectually prevent the rocky beaches from being searched, as our own experience with the "Stella" amply proved.

I may conclude by saying that the presence of a large *Patella* in the Kermadec Group was alluded to in my account of the botany of the Group (Trans. N.Z. Institute, Vol. xx., p. 165) and in Mr. Percy Smith's official report to the New Zealand Government ("The Kermadec Islands, their capabilities and extent," p. 27).